

## A NEW SISORID CATFISH OF THE GENUS *GLYPTOTHORAX* BLYTH FROM MANIPUR, INDIA<sup>1</sup>

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*Glyptothorax ventrolineatus* – a new sisorid catfish is described from the Chindwin basin of Manipur, India. The new species has the following combination of characters: three longitudinal light bands on the body – one on mid-dorsal line, one on lateral line and one on mid-ventral line; nasal barbel length twice the internasal length; supra-occipital process not in contact with first dorsal pterygiophore; its width 38.3-44.7% of its length.

**Key words:** *Glyptothorax*, new species, Manipur

### INTRODUCTION

Fish of the genus *Glyptothorax* Blyth are small to medium sized catfishes belonging to Family Sisoridae, which is a composite assemblage of divergent forms. The genus is characterised by its greatly depressed head, thick and papillated lips and an adhesive apparatus with or without a central pit on ventral surface of the thorax (Jayaram 1979). *Glyptothorax* is widespread in South Asia: from Tigris-Euphrates basin eastward to Vietnam and eastern China. There are more than fifty valid species, most of which have restricted geographical distribution (Kullandar *et al.* 1999). Hora (1921) described *G. minutus* from Imphal stream near Karong, and reported the occurrence of *G. dorsalis* Vinciguerra in Manipur Valley and Myanmar. Menon, A.G.K. (1954a) described *G. manipurensis* from the Barak river at Karong of Manipur, and reported the occurrence of *G. trilineatus* Blyth and *G. platypogonoides* Bleeker in the state.

Iril river is a principal tributary of the Imphal river, which in turn joins the Chindwin river in Myanmar. Lokchao river is also a tributary of the Chindwin drainage system. A collection of fishes from the rivers included specimens of *Glyptothorax*, which do not fit into the hitherto described species of the genus. The new fish is described here.

### MATERIAL AND METHODS

Measurements and counts follow Jayaram (1999). Measurements were made with a dial calliper to the nearest 0.1 mm and expressed in percentage of standard length (SL) or head length (HL). The specimens are deposited in the Manipur University Museum of Fishes (MUMF).

*Glyptothorax ventrolineatus* sp. nov.

**Material Examined: Holotype:** MUMFL0221, 85.8 mm SL; Iril river, Ukhrul district, Manipur, India, 15.i.2003,

I. Linthoingambi. **Paratypes:** MUMF L0222/5, 5 exs., 85.1-94.5 mm SL; data same as holotype; MUMF 4300/4, 4 exs., 67.2-83.2 mm SL. Lokchao river, Moreh, Chandel district, Manipur, India, 10.iv.2003, K. Nebeshwar and party.

**Diagnosis:** A species of *Glyptothorax* with three longitudinal light bands; one each along mid-dorsal line, lateral line and mid-ventral line of the body. Surface of head, body and adipose dorsal fin granulated. Length of nasal barbel twice internasal length. Supra-occipital process not in contact with first dorsal pterygiophore; its width 38.3-44.7% of its length. Adipose dorsal fin base length equals rayed dorsal fin base length. Caudal fin longer than head length.

**Description:** D.I, 6; P.I, 9; V.I, 5; A. iii, 9; C. 7+8. Body elongate, compressed posteriorly. Head depressed, occipital process twice as long as broad, not in contact with first dorsal pterygiophore. Mouth terminal, transverse, eyes small. Barbels four pairs. Maxillary barbels basally thick, distally tapering, reaching posterior base of pectoral fins; mandibular barbel reaches anterior margin of pectoral fin base; inner mandibular equal to interorbital; nasal length twice that of internasal, reaching anterior margin of orbit. Supra-occipital process 38.3-44.7% of its length, not in contact with first dorsal pterygiophore. Teeth villiform in crescentic band in jaws. The thoracic adhesive apparatus is longer than broad, open caudally, without a central pit. Rayed dorsal fin base almost twice head length, (44.4-48.1% of head length); its origin midway between tip of snout and adipose dorsal origin; dorsal spine finely serrated on tip, laterally; base of rayed dorsal equals that of adipose dorsal; adipose dorsal base 37.1-45.4% of interdorsal distance. Pectoral fin low, horizontal, with a broad, flattened, posteriorly serrated spine, does not reach origin of pelvic fin. Pelvic fin length 69.7-79.9% of head length, may or may not reach anal fin. Anal fin 57.7-69.6% of head length; its origin opposite anterior base of adipose dorsal, nearer to pelvic fin origin than to caudal fin base. Caudal fin longer than head length, deeply forked, lobes sub-equal, the lower lobe being the longer. Least height of caudal peduncle

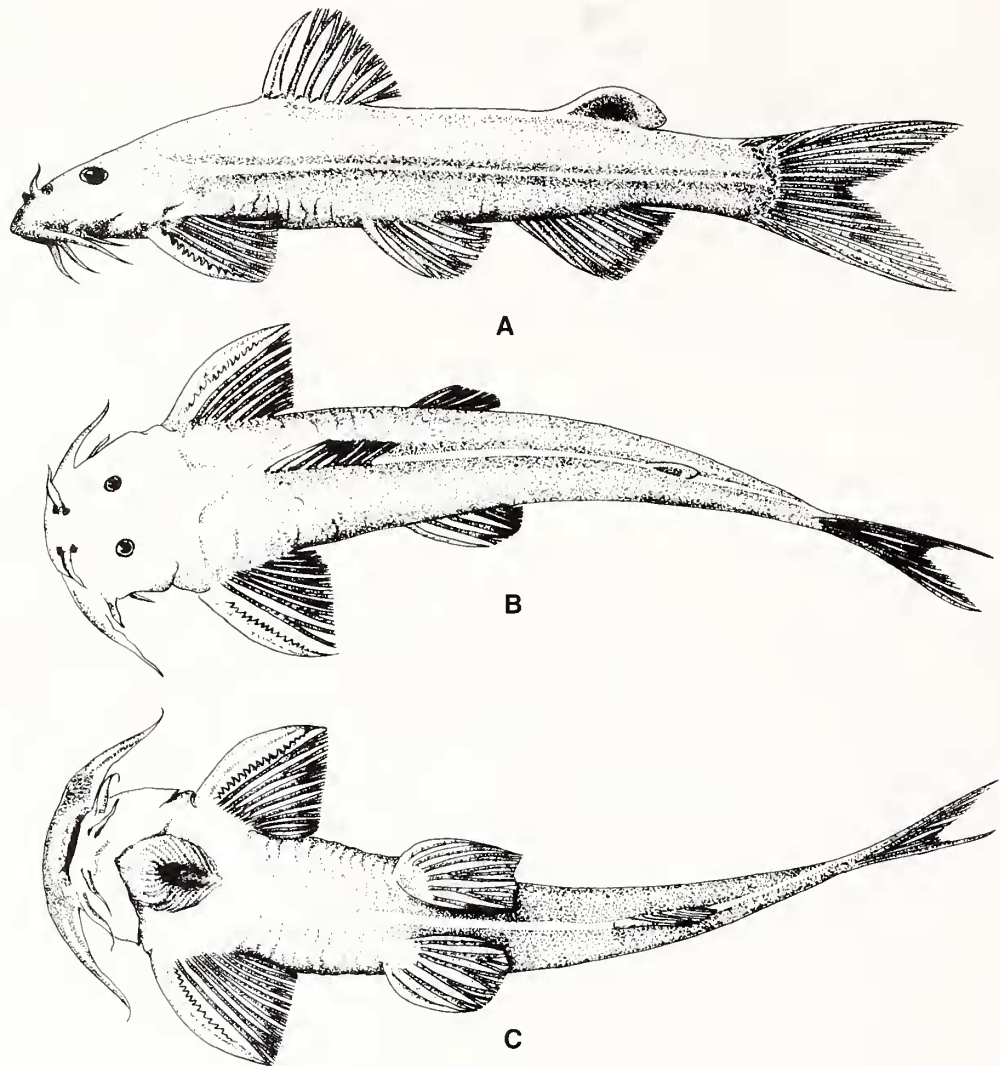


Fig. 1: *Glyptothorax ventrolineatus* sp. nov.  
A-Lateral, B-Dorsal and C-Ventral views

46.3-55.4% of its length. Surface of head, body and adipose dorsal fin granulated. Lateral line complete. Morphometric data of the specimens are given in Table 1.

**Sexual dimorphism:** Unknown.

**Colour:** Dark brown or greyish, abdomen and underside of head creamish. Anal, pectoral and ventral fins creamish, dorsal base dark brown, a row of light stripes on the rays except the tips of the fin rays. Three creamish longitudinal light bands on the body – one on the back, one on the lateral line and one on the mid-ventral part of the body.

**Etymology:** The species is named after its characteristic light mid-ventral band.

**Distribution:** INDIA: Iril river, Ukhrul district, Manipur (Chindwin basin); Lokchao river, Moreh, Chandel district, Manipur.

**Discussion:** The new species of *Glyptothorax* under

description has three characteristic longitudinal bands on the body, which makes it close to *G. trilineatus*. Hora (1923) quoted Blyth's (1860) description of *G. trilineatus* and described the characteristic longitudinal bands of the species to be one on the mid-dorsal line, and one each on the lateral line. Menon, M.A.S. (1954) also followed suit. Hora (1923), however, remarked that such type of colouration is shared among some of the other members of the genus. The Indochinese species *G. laoensis* Fowler, as diagnosed by Kottelat (1998), also has similar lines. Day (1878) recognised the characteristic bands to be one each on the back, lateral line and ventro-lateral area. Subsequent workers (Menon, M.A.S. 1954; Misra 1976; Jayaram 1979; Talwar and Jhingran 1991; Jayaram 1999) also adopted the same. Thus, hitherto known characteristic bands for the species are one each on the dorsal, lateral line, and ventro-lateral area.

NEW DESCRIPTIONS

**Table 1:** Morphometric data of *Glyptothorax ventrolineatus* in % of SL and HL, except SL, in mm

Characters	In % Standard Length Mean (Range) ± S.D.	In % Head Length Mean (Range) ± S.D.
Standard Length	(67.2-87.0)	—
Head Depth (at occiput)	14.1(12.5-15.5) ±1.0	61.2(57.5-66.3)±3.5
Head Depth (at eye)	9.7(8.8-11.1) ±0.8	42.0(39.5-46.3) ±2.8
Head Width (at nares)	13.4(12.3-14.5) ±0.9	60.3(55.5-63.0) ±3.4
Max. Head Width	19.1(18.5-21.0) ±3.9	85.4(82.7-90.6) ±2.6
Snout length	11.1(10.06-11.9) ±0.6	48.0(45.6-49.3) ±1.2
Eye Diameter	2.3(2.06-2.6) ±0.2	10.2(9.2-11.2) ±0.8
Inter-orbital space	7.5(6.5-8.2) ±0.5	32.8(29.9-37.5) ±2.4
Gape Width	9.8(9.1-10.7) ±0.5	42.7(40.4-45) ±1.7
Internarial Space	3.9(3.8-4.2) ±0.1	17.3(16.0-18.7) ±0.8
Body Width (at dorsal origin)	17.0(15.6-18.3) ±1.05	72.2(71.0-74.2) ±2.9
Body Width (at anal origin)	10.9(9.6-12.6) ±1.08	47.4(40.4-54.4) ±4.2
Caudal peduncle length	18.3(17.0-19.9) ±1.08	79.5(73.1-88.7) ±6.6
Caudal peduncle height	9.6(9.2-10.3) ±0.4	41.9(38.5-46.7) ±2.8
Dorsal fin base length	10.6(10.3-11.1) ±0.2	46.08(44.4-48.1) ±1.5
Length of adipose fin	10.5(9.3-11.1) ±0.6	45.8(40.4-48.7) ±2.6
Length of pectoral fin	22.8(21.4-24.0) ±0.9	104.3(100.5-108.7) ±3.9
Length of ventral fin	17.4(16.6-18.5) ±0.6	75.7(69.7-79.9) ±4.5
Length of anal fin	14.4(13.8-15.8) ±0.7	62.5(57.7-69.6) ±4.1

Thus, *G. ventrolineatus* sp. nov. differs from *G. trilineatus* in having a longitudinal light band on the mid-ventral line of the body vs. no band; nasal barbel length twice internasal length vs. equal; width of occipital process 38.3-44.7 vs. 25.0-33.3% of its length; dorsal spine smooth posteriorly, finely serrated laterally at tip vs. finely serrated

posteriorly at tip, smooth laterally.

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